

Department of Systems Engineering and Engineering Management

Seminar Series

Reliability Assessment of Safety Critical Systems

Dr. Yiliu Liu

Associate professor

Department of Production and Quality Engineering
Norwegian University of Science and Technology, Norway

Date:	16 December 2013 (Mon)
Time:	11:00am (Tea/Coffee service at 10:45am)
Venue:	Room Y5-310, 6/F, AC1

Abstract

A safety-critical system is a system whose failure might lead to harm to people, economic loss, and/or environmental damage. In this report, we mainly consider safety-critical systems where E/E/PE technology plays an important role, often together with mechanical or other technology items. Such systems are often called as safety-instrumented systems (SISs), and they have been widely used to protect the equipment under control (EUC) in variety of industries. Several international standards give requirements to the reliability, or safety integrity, of such systems. The most important of these standards is IEC 61508. The objective of this report is to introduce and describe some concepts, terminology, and main approaches in the reliability assessment of these systems.

About the Speaker

Yiliu Liu is an associate professor in the department of production and quality Engineering, Norwegian University of Science and Technology, which is located in Trondheim, Norway. He received the PhD and master degree in industrial engineering, and a bachelor degree in mechanical engineering, all of which are from Tianjin University, China. Now, his research interests include reliability modeling and analysis of safety-critical systems, product life cycle management and product warranty.

Enquiry: 3442 8408

All are Welcome!